

MERCHANT &amp; GOULD P.C.

## United States Patent Application

## DECLARATION

As a below named inventor, we hereby declare that: our residences, post office addresses and citizenships are as stated below next to our names; that

We verily believe we are the original, first and joint inventors of the subject matter which is claimed and for which a patent is sought on the invention entitled METHOD AND SYSTEM FOR CACHE MANAGEMENT ALGORITHM SELECTION, the specification of which is attached hereto.

We hereby state that we have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

We acknowledge the duty to disclose information which is material to the patentability of this application in accordance with Title 37, Code of Federal Regulations, § 1.56 (described hereinbelow).

We hereby claim foreign priority benefits under Title 35, United States Code, § 119/365 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on the basis of which priority is claimed:

- a no such applications have been filed.
- b such applications have been filed as follows:

FOREIGN APPLICATION(S), IF ANY, CLAIMING PRIORITY UNDER 35 USC § 119			
COUNTRY	APPLICATION NUMBER	DATE OF FILING (day, month, year)	DATE OF ISSUE (day, month, year)
ALL FOREIGN APPLICATION(S), IF ANY, FILED BEFORE THE PRIORITY APPLICATION(S)			
COUNTRY	APPLICATION NUMBER	DATE OF FILING (day, month, year)	DATE OF ISSUE (day, month, year)

We hereby claim the benefit under Title 35, United States Code, § 120/365 of any United States and PCT international application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, § 112, we acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, § 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application.

U.S. APPLICATION NUMBER	DATE OF FILING (day, month, year)	STATUS (patented, pending, abandoned)

We hereby claim the benefit under Title 35, United States Code § 119(e) of any United States provisional application(s) listed below:

U.S. PROVISIONAL APPLICATION NUMBER	DATE OF FILING (Day, Month, Year)
60/322,493	September 14, 2001

We hereby declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

2	Full Name Of Inventor	Family Name Herbst	First Given Name James	Second Given Name Arthur
0	Residence & Citizenship	City Longmont	State or Foreign Country Colorado	Country of Citizenship USA
1	Post Office Address	Post Office Address 2125 Sand Dollar Drive	City Longmont	State & Zip Code/Country CO 80503

Signature of Inventor 201:  Date: 11/29/01

2	Full Name Of Inventor	Family Name Baum	First Given Name Carol	Second Given Name Michiko
0	Residence & Citizenship	City Longmont	State or Foreign Country Colorado	Country of Citizenship USA
2	Post Office Address	Post Office Address 5671 Steeple Chase Drive	City Longmont	State & Zip Code/Country CO 80503

Signature of Inventor 202:  Date: 11-29-01

2	Full Name Of Inventor	Family Name Dixon	First Given Name Robert	Second Given Name William
0	Residence & Citizenship	City Longmont	State or Foreign Country Colorado	Country of Citizenship USA
3	Post Office Address	Post Office Address 310 Widgeon Drive	City Longmont	State & Zip Code/Country CO 80503

Signature of Inventor 203:  Date: 11-29-01

## § 1.56 Duty to disclose information material to patentability.

(a) A patent by its very nature is affected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclose information exists with respect to each pending claim until the claim is canceled or withdrawn from consideration, or the application becomes abandoned. Information material to the patentability of a claim that is canceled or withdrawn from consideration need not be submitted if the information is not material to the patentability of any claim remaining under consideration in the application. There is no duty to submit information which is not material to the patentability of any existing claim. The duty to disclose all information known to be material to patentability is deemed to be satisfied if all information known to be material to patentability of any claim issued in a patent was cited by the Office or submitted to the Office in the manner prescribed by §§ 1.97(b)-(d) and 1.98. However, no patent will be granted on an application in connection with which fraud on the Office was practiced or attempted or the duty of disclosure was violated through bad faith or intentional misconduct. The Office encourages applicants to carefully examine:

- (1) prior art used in search reports of a foreign patent or in a counterpart application, and
- (2) the closest information over which individuals associated with the filing or prosecution of a patent application believe any pending claim patentably defines, to make sure that any material information contained therein is disclosed to the Office.

(b) Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and

- (1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or
- (2) It refutes, or is inconsistent with, a position the applicant takes in:
  - (i) Opposing an argument of unpatentability relied on by the Office, or
  - (ii) Asserting an argument of patentability.

A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

(c) Individuals associated with the filing or prosecution of a patent application within the meaning of this section are:

- (1) Each inventor named in the application;
- (2) Each attorney or agent who prepares or prosecutes the application; and
- (3) Every other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application.

(d) Individuals other than the attorney, agent or inventor may comply with this section by disclosing information to the attorney, agent, or inventor.

## PATENT

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s):	James Arthur Herbst, Carol Michiko Baum, Robert William Dixon		
Serial No.:	Not known	Examiner:	Not known
Filed:	Herewith	Group Art Unit:	Not known
Title:	METHOD AND SYSTEM FOR CACHE MANAGEMENT ALGORITHM SELECTION		
Docket:	STL10474/40046.174USU1		

POWER OF ATTORNEY BY ASSIGNEE OF ENTIRE INTEREST  
(REVOCATION OF PRIOR POWERS)

As assignee of record of the entire interest of the above identified application, all powers of attorney previously given are hereby revoked and the following practitioners/patent agents are hereby appointed to prosecute and transact all business in the Patent and Trademark Office connected therewith.

Shawn B. Dempster, Registration No. 34,321	Edward P. Heller, III, Registration No. 29,075
Jonathan E. Olson, Registration No. 41,231	Raghunath S. Minisandram, Registration No. 38,683
Derek J. Berger, Registration No. 45,401	Paul T. Dietz, Registration No. 38,858
Kirk A. Cesari, Registration No. 47,479	Carol I. Bordas, Registration No. 37,284
Mitchell K. McCarthy, Registration No. 38,794	

And members of the firm of Merchant & Gould P.C.

Albrecht, John W.	Reg. No. 40,481	Jardine, John S.	Reg. No. P-48,835
Ali, M. Jefser	Reg. No. 46,359	Johns, Nicholas P.	Reg. No. 48,995
Altera, Allan G.	Reg. No. 40,274	Johnston, Scott W.	Reg. No. 39,721
Anderson, Gregg I.	Reg. No. 28,828	Kadievitch, Natalie D.	Reg. No. 34,196
Batzli, Brian H.	Reg. No. 32,960	Kaseburg, Frederick A.	Reg. No. 47,695
Beard, John L.	Reg. No. 27,612	Kettelberger, Denise	Reg. No. 33,924
Berns, John M.	Reg. No. 43,496	Keys, Jeramie J.	Reg. No. 42,724
Branch, John W.	Reg. No. 41,633	Knearl, Homer L.	Reg. No. 21,197
Brown, Jeffrey C.	Reg. No. 41,643	Kowalchyk, Alan W.	Reg. No. 31,535
Bruess, Steven C.	Reg. No. 34,130	Kowalchyk, Katherine M.	Reg. No. 36,848
Byrne, Linda M.	Reg. No. 32,404	Lacy, Paul E.	Reg. No. 38,946
Campbell, Keith	Reg. No. 46,597	Larson, James A.	Reg. No. 40,443
Carlson, Alan G.	Reg. No. 25,959	Leonard, Christopher J.	Reg. No. 41,940
Caspers, Philip P.	Reg. No. 33,227	Liepa, Mara E.	Reg. No. 40,066
Clifford, John A.	Reg. No. 30,247	Lindquist, Timothy A.	Reg. No. 40,701
Cook, Jeffrey	Reg. No. P-48,649	Lown, Jean A.	Reg. No. 48,428
Daignault, Ronald A.	Reg. No. 25,968	Mayfield, Denise L.	Reg. No. 33,732
Daley, Dennis R.	Reg. No. 34,994	McDonald, Daniel W.	Reg. No. 32,044
Daulton, Julie R.	Reg. No. 36,414	McIntyre, Jr., William F.	Reg. No. 44,921
DeVries Smith, Katherine M.	Reg. No. 42,157	Mitchem, M. Todd	Reg. No. 40,731
DiPietro, Mark J.	Reg. No. 28,707	Mueller, Douglas P.	Reg. No. 30,300
Doscotch, Matthew A.	Reg. No. P-48,957	Nelson, Anna M.	Reg. No. 48,935
Edell, Robert T.	Reg. No. 20,187	Paley, Kenneth B.	Reg. No. 38,989
Epp Ryan, Sandra	Reg. No. 39,667	Parsons, Nancy J.	Reg. No. 40,364
Glance, Robert J.	Reg. No. 40,620	Pauly, Daniel M.	Reg. No. 40,123
Goff, Jared S.	Reg. No. 44,716	Phillips, John B.	Reg. No. 37,206
Goggin, Matthew J.	Reg. No. 44,125	Pino, Mark J.	Reg. No. 43,858
Golla, Charles E.	Reg. No. 26,896	Prendergast, Paul	Reg. No. 46,068
Gorman, Alan G.	Reg. No. 38,472	Pytel, Melissa J.	Reg. No. 41,512
Gould, John D.	Reg. No. 18,223	Qualey, Terry	Reg. No. 25,148
Gregson, Richard	Reg. No. 41,804	Reich, John C.	Reg. No. 37,703
Gresens, John J.	Reg. No. 33,112	Reiland, Earl D.	Reg. No. 25,767
Hamer, Samuel A.	Reg. No. 46,754	Samuels, Lisa A.	Reg. No. 43,080
Hamre, Curtis B.	Reg. No. 29,165	Schmaltz, David G.	Reg. No. 39,828
Harrison, Kevin C.	Reg. No. 46,759	Schuman, Mark D.	Reg. No. 31,197
Hertzberg, Brett A.	Reg. No. 42,660	Schumann, Michael D.	Reg. No. 30,422
Hillson, Randall A.	Reg. No. 31,838	Scull, Timothy B.	Reg. No. 42,137
Holzer, Jr., Richard J.	Reg. No. 42,668	Sebald, Gregory A.	Reg. No. 33,280
Hope, Leonard J.	Reg. No. 44,774	Skoog, Mark T.	Reg. No. 40,178

Spellman, Steven J.	Reg. No. 45,124	Weaver, Paul L.	Reg. No. P-48,640
Stewart, Alan R.	Reg. No. 47,974	Welter, Paul A.	Reg. No. 20,890
Stoll-DeBell, Kirstin L.	Reg. No. 43,164	Whipps, Brian	Reg. No. 43,261
Sullivan, Timothy	Reg. No. 47,981	Whitaker, John E.	Reg. No. 42,222
Sumner, John P.	Reg. No. 29,114	Wier, David D.	Reg. No. P-48,229
Swenson, Erik G.	Reg. No. 45,147	Williams, Douglas J.	Reg. No. 27,054
Tellekson, David K.	Reg. No. 32,314	Withers, James D.	Reg. No. 40,376
Trembath, Jon R.	Reg. No. 38,344	Witt, Jonelle	Reg. No. 41,980
Tunheim, Marcia A.	Reg. No. 42,189	Wu, Tong	Reg. No. 43,361
Underhill, Albert L.	Reg. No. 27,403	Young, Thomas	Reg. No. 25,796
Vandenburgh, J. Derek	Reg. No. 32,179	Zeuli, Anthony R.	Reg. No. 45,255
Wahl, John R.	Reg. No. 33,044		

**CHANGE OF ATTORNEY'S/AGENT'S ADDRESS IN APPLICATION**

Merchant & Gould P.C.  
P.O. Box 2903  
Minneapolis, MN 55402-0903

**STATEMENT UNDER 37 CFR 3.73(b)**

Seagate Technology LLC states that it is the Assignee of Entire Interest in the patent application/patent identified above by virtue of an Assignment from the inventor(s) of the patent application/patent identified above. A copy of the Assignment is attached and/or was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_. The undersigned (whose title is supplied below) is empowered to sign this statement on behalf of the Assignee.

Respectfully submitted,

**SEAGATE TECHNOLOGY LLC**  
(Assignee of Entire Interest)



Kirk A. Cesari, Reg. No. 47,479  
SEAGATE TECHNOLOGY LLC  
Intellectual Property - SHK2LG  
1280 Disc Drive  
Shakopee, MN 55379  
Telephone: 952.402.3534  
Facsimile: 952.402.2657

12-7-01  
Date.

## **ASSIGNMENT**

Attorney Docket No. :M&G40046.174USU  
Seagate Docket No. : STL10474

WHEREAS, I/we James Arthur Herbst of 2125 Sand Dollar Drive, Longmont, CO 80503, Carol Michiko Baum of 5671 Steeple Chase Dr., Longmont, CO 80503, and Robert William Dixon of 310 Widgeon Drive, Longmont, CO 80503, are the inventor(s) of an invention entitled Method and System For Cache Management Algorithm Selection that is the subject matter of: (check all that apply)

- a provisional application for Letters Patent which is identifiable in the United States Patent and Trademark Office by Application No. 60/322,493 filed on September 14, 2001;

an application for Letters Patent which is identifiable in the United States Patent and Trademark Office by Application No. \_\_\_\_\_ filed on filed herewith and/or executed on even date herewith; and

an international application for Letters Patent filed pursuant to the Patent Cooperation Treaty which is identifiable in the United States Receiving Office by Application No. \_\_\_\_\_ filed on \_\_\_\_\_; and/or executed on even date herewith:

WHEREAS, Seagate Technology LLC, a limited liability company organized and existing under the laws of the State of Delaware and the United States of America, and having offices at 920 Disc Drive, Scotts Valley, California, 95066 USA, ("Assignee") is desirous of acquiring the entire right, title and interest in and to the invention, the applications, and any and all Letters Patent or similar foreign or domestic legal protection;

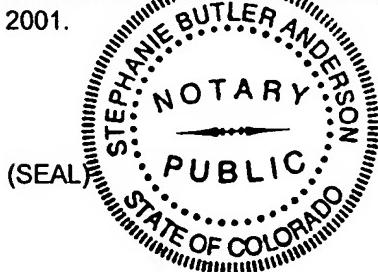
NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, I/we transfer to Assignee, its successors and assigns, my/our entire right, title and interest in and to the invention, the above-identified applications, all provisional applications from which any of the above-identified applications claim priority, corresponding domestic and foreign applications, any continuation, division, renewal, or substitute for the applications, all Letters Patent, any reissue, re-examination, or similar legal protection issuing related to the Letters Patent, and all rights and benefits under any applicable treaty or convention; and I/we authorize the Director of the United States Patent and Trademark Office or foreign equivalent to issue the Letters Patent or similar legal protection to the Assignee.

I/We authorize the Assignee, its successors and assigns, to insert in this instrument the filing date(s) and application numbers when ascertained. I/We further authorize the Assignee, its successors and assigns, or anyone it may properly designate, to apply for Letters Patent or similar legal protection, in its own name if desired, in any and all foreign countries and appoint Assignee the common representative in the above identified international application and any international application for the invention.

I/We represent to the Assignee, its successors and assigns, that I/we have not and shall not execute any writing or do any act whatsoever conflicting with this Assignment. I/We, my/our executors or administrators, will at any time upon request, without additional consideration, but at the expense of the Assignee, its successors and assigns, execute and deliver to Assignee or its legal representatives such additional writings and do such additional acts as the Assignee, its successors and assigns, may deem desirable to perfect its enjoyment of this grant, and render all assistance in making application for and obtaining, maintaining, and enforcing the Letters Patent or similar legal protection on the invention in any and all countries, including without limitation providing testimony in any related interference, litigation or proceeding.

James Arthur Herbst (Inventor)

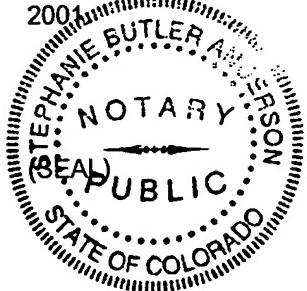
Subscribed and sworn to before me at Longmont, Colorado, a Notary Public, this 29 day of November, 2001.



Stephanie Bowes Anderson  
Notary Public      MY COMMISSION EXPIRES 2/20/2015

Carol Michiko Baum (Inventor)

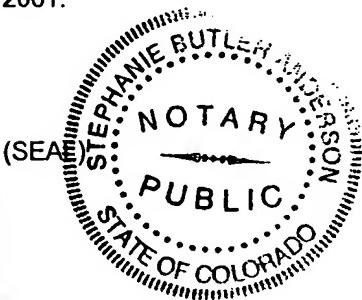
Subscribed and sworn to before me at Longmont, Colorado, a Notary Public, this 3 day of December,  
2001.



Stephanie B. Anderson  
Notary Public      MY COMMISSION EXPIRES 2/20/2035

Robert William Dixon (Inventor)

Subscribed and sworn to before me at Longmont, Colorado, a Notary Public, this 6<sup>th</sup> day of December, 2001.



*Stephanie Butler Anderson*  
Stephanie Butler Anderson  
Notary Public  
My Commission Expires 2/20/2005